

## Medical Wastes Management A Policy Review\*)

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### Abstract

*Since so many mishandling of medical waste in various places in Indonesia that has endangered our environment by the potential disease that easily can spread to our society, it is very important for all of us to address it on how to improve the medical waste management. There are area of improvement needed in our regulation, public policies disciplines and social awareness and especially the importance of proper handling of medical waste by the medical waste producers such as hospital, clinic and laboratories. This study is not intended to produce scientific theory but more focus on how to solve the problem of medical waste with the limit time and less costly manner or in the other words as a macro diagnosis of "the main causes of the problems" of medical waste management in Indonesia. This study has made clear conclusion that Indonesia has to follow the basic principle and guidelines of International standards and recommends improvement of the coordination between Ministry of Health and Ministry of Environment, toward "one roof policy", "strong political will of top government to empower MOE and also Law No. 18, 2008 and Law No. 32, 2009 must be reviewed toward "Polluter pay the price" Policy. The government also must allocate sufficient fund to function as regulator and controlling body and increase social awareness for environmental health.*

*Key note: Medical waste, public policy, environmental health*

### Background

In modern world that we are now living, it is very obvious that people are easily traveling, communicating, and interacting worldwide from one place to the other part of the world. In brief we call it "we live in global society", although there are many advantages that human race can take the benefit such as exchanging sciences, culture convergences and countless economic benefits but there are also negatives impacts, one of those that we notice diseases are easily spread in a very high speed from one area to the other part of the world.

Quality of life, Environmental and Natural Resources Preservation, Health Consciousness, Medication and Prevention Against Diseases especially infectious medical waste disposal management becoming global issues and being addressed in many national

and international forum, seminars, conferences which lead to formulation of numerous National and International Standards, Codes, Legal Acts and Regulation.

It is becoming extremely important for one country to study any development in other countries especially for developing country such as Indonesia to learn what the other countries have achieved.

The Law Regulation and Policies of Indonesia are imperative to be reviewed from time to time, since so many discrepancies and improper handling of Medical and Hospital Waste Disposal that has endangered our society.

On May 17, 2008 the Parliament has enacted Solid Waste Management Act No. 18/2008 (MoE, 2008), according to

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this Act medical waste is categorized as a specific waste and it will be regulated by central government regulations, the Law No. 18/2008 clearly stated that the responsibility of central government and local governments in providing sufficient funds for waste management. This Law No. 18/2008 was reinforced by Law No. 32/2009 on "Protection and Management of Environment for Improvement of life".

Even after application of the above law, there are still obvious discrepancies and improper handling of medical waste that need to be rectified for us (in Indonesia), to reach the international standards in managing medical waste. Our finding which has publicly known are a lot of mishandling of medical waste such as :

- a. "Clinical waste disposal especially infectious wastes are not properly handled by majority of hospitals clinics, infectious wastes are collected and mixed with general wastes and dumped in the same bag in public waste dumping places (TPA)" said Dr Setyo Sarwanto Head of HR & E University of Indonesia.
- b. Some hospitals have been dumping untreated and potentially hazardous medical waste into the rivers
- c. "Clinical wastes is not treated properly from sampling of 107 hospitals only 10 hospitals have incinerators."
- d. WHO study in association with Ministry of Health (MoH) concluded

that the treatment of clinical wastes in Jakarta is still substandard and worst in other town outside Jakarta.

- e. The Health Ministerial decrees as well as the environmental ministerial decrees are not well implemented by the local and regional authorities.

Our study try to find out the main cause of the problem and we identify the medical waste problems in Indonesia by the following categories (see table 1) :

**a) Structural Problems.**

Intergovernment problems, such as coordination problems between Ministry of Health (MoH) with KLH (Ministry of Environment), lack of authority of KLH (Ministry of Environment).

**b) Regulations and Policy problems.**

Overlapping regulations issued by different Government Agencies and some unsatisfactory implementation of policies, lack of enforcement, etc.

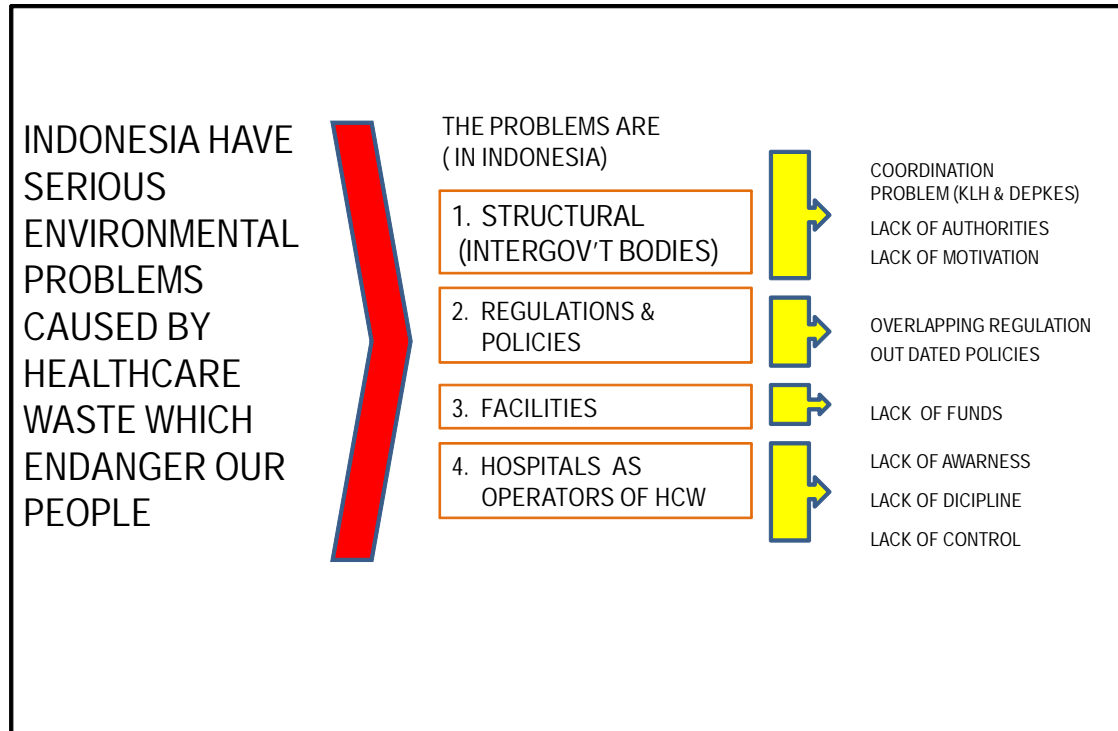
**c) Government Facilities.**

Lack of funds which leads to obsolete instruments and facilities and substandard compensation for Environmental official controllers resulting demotivation even malpractices.

**d) Hospitals or healthcare operators.**

The hospitals as the operators who have the responsibility for the management of MEDICAL WASTES are still facing the problem of lack of awareness, lack of discipline and lack of control in doing their function.

Tabel 1



Understanding the above 4 categories of problems are macro social and political issues we need to look to the following issues :

- a. The classical controversies arised between "industrialist business society" and on the otherside conservationist where numerous debates, seminars, symposium addressing the subject and number of books are published.
- b. The spread of toxic and hazardous substances ,global warming ,loss of biodiversities, air and water polution have forced the government and politician to take major roles in this global problems.

- c. The political scientists believe that the government has an indispensable role to play in environmental protection and its improvement. The government plays a preeminent role in this policy arena primarily because environmental threats represent public or collective goods problems.

Although government has issued a lot of program but such actions are often insufficient without the backing of the public policy and collective action by the society are needed.

*"The Environmental Policy, New Directions for the 21<sup>st</sup> century" by Prof*

*Norman J. Vig and Prof Michael E.Kraft* ).

We can not address any Environmental issues effectively without directions, involvement and consent of government, politicians and strong business circles. Only the join efforts by all of those parties (although each of them has different interest views) but they have to come to common ground of national and human interests.

The above theories of Public policy leads us to a presumption that in our study of medical waste problems, the

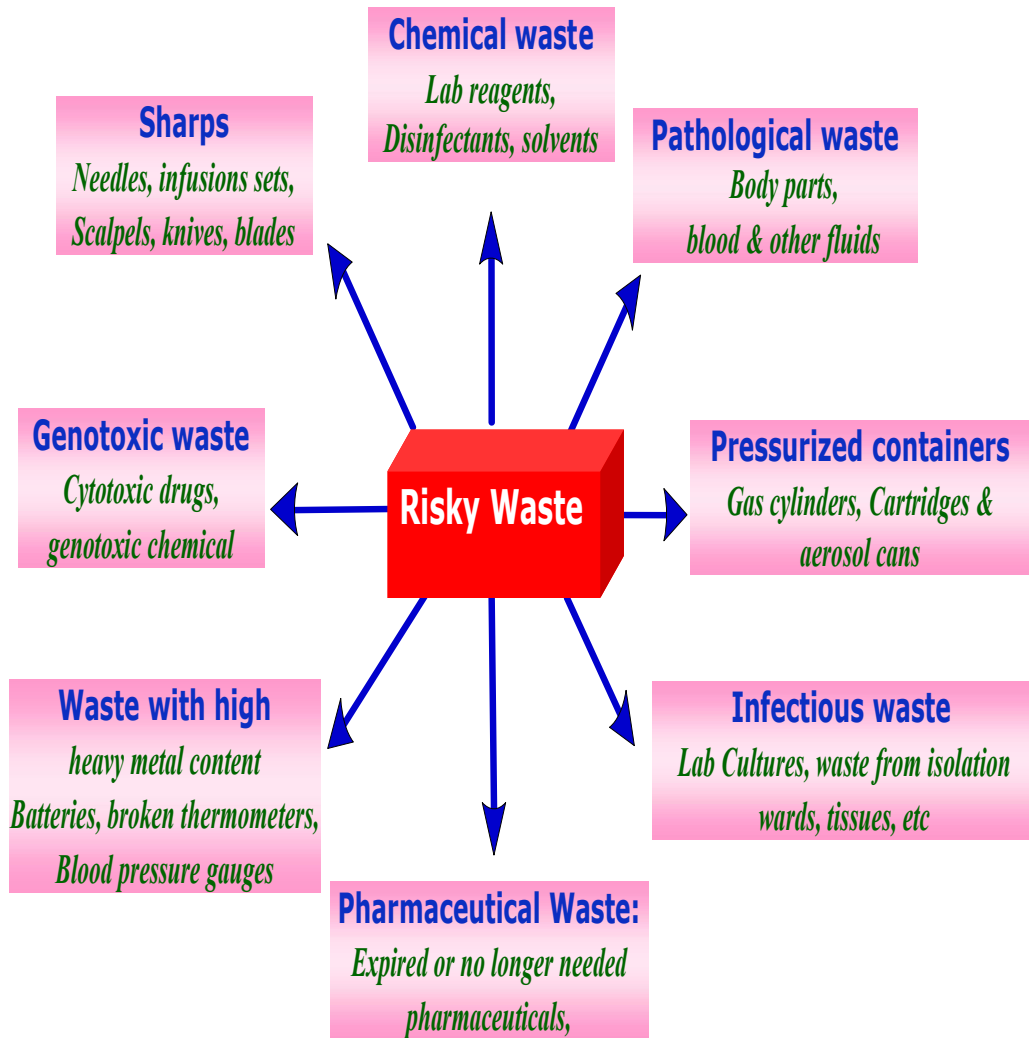
government roles is imminent and shall takes a major roles.

It should involves Structural and Regulations and policies reviewed and corrected by the relevant government institution

### **Healthcare Waste Management**

Healthcare wastes is waste that being produced by healthcare facilities which can be categorized as:

1. Non-Risk Waste (75%-80%).
2. Risk Wastes (20%-25%) which consist of various hazardous substances as being shown in the following chart:



Resources : Medical Waste Management Issues in Asia, C. Visavanathan, Environmental Engineering & Management Program, Asian Institute of Technology, Thailand.

### 1. Structural and Inter Government Bodies Problems in Indonesia

As we notice from previous finding that Indonesia is still facing major environmental problems including

medical waste which are now being managed by Ministry of Health (DEPKES) and Ministry of Environment (KLH).

This dualism has potential inter government bodies management problems such as :

- ) Lack of coordination
- ) Overlapping activities
- ) Confusion of authorities among the government agencies.

## 2. Regulation and Policies Problems

- a. There are clauses in our Law (Law No. 18/2008 and Law No. 32/2009) which needs to be fine tuned to avoid multi interpretation and confusion such as:
  - ) Handling of Management of medical waste “is that the responsibility of operators (Hospital, Clinic, etc) or the responsibility of government. (As the regulations body) ?”
  - ) No Clear division of responsibility between the regulators (the Government of Indonesia) and the operators (Hospital, Clinics, etc) who actually are the producer of medical wastes.
- b. There is no firm and consistent Political Will from top central government on commitment to “sustainable development and environmental protection programs”.

## 3. Facilities and Funds

As we all know maintaining good environment and clean circumstances are costly, sufficient fund, technical skill and proper procedure are required at continuous manners which in turn need sufficient budget and funds by the government (as stipulated by Law No. 18/2008 and Law No. 32.2009).

We notice that allocation of budget and funds for training, coaching of government controllers, sophistication of instruments,

operations fund to function their duties of this environment government body (KLH) is much less than it needs.

This insufficient fund has caused MoE (KLH) practically limb to work effectively especially to monitor, control al hospitals clinics and other producers of medical wastes in Indonesia.

## 4. The Operators (Hospital, Clinic, Labs)

The healthcare operators such as hospital, clinics, etc who actually the producer of medical wastes. They are producing all type of infectious wastes, general wastes, but they have limited responsibility to manage medical wastes properly, and clauses in the law have limit their liability. These clauses that need to be reviewed further. The above situation has caused serious problems such as:

- Lack of regular control by the MoE and MoH of inspectors to assure the implementation of medical wastes management within the Operators Institutions.
- Lack of awareness by the Operators to implement the medical wastes regulation
- Lack of discipline of the Healthcare Operations.
- Lack of skill of the personnel within the operators organization.

From our documentary research as stated in previous chapter we can come hypotetic conclusion as follow:

## **CONCLUSION, RECOMMENDATION AND LESSON LEARN**

This study has used some references of ISO 14000, ISO 14001, WHO Guidance has come to useful conclusion especially for Indonesia in improving medical wastes management reducing mishandling of medical wastes.

This study has gathered, compiled and analyzed most relevant document, data covering regulation, policies, stage of social awareness, disciplines of the operators (hospital, etc) of all parties/institution involved directly and indirectly on medical waste management.

We fully realized that the complexity if medical wastes handling which involved macro social and economic policies such as Government policies, regulations and various inter government Public policies where various matters are interrelated, but this research has shown the direction on how to move forward to achieve proper medical wastes management especially for implementation medical management in Indonesia.

There are some area that we identified for improvement in medical waste management in Indonesia such as :

1. The coordination between MoH (Depkes) and MoE (KLH) has to be intensified toward unity of policies which step by step moving to "one roof policy" in handling medical wastes, eliminating "dualism" in medical wastes

management. This "one roof policy" has been implemented in most countries in the world and recommended by International codes and guidelines.

2. It is imperative to empowers MoE (KLH) to play significant roles in medical wastes management with the support of MoH (Depkes), Universities and more strong political will by the Top Government of RI for enforcing the implementation of proper medical wastes management.
3. Further review of Law No. 18/2007 and No. 32.2009 and simplification of various Ministerial Decrees, Circular letters and other guidelines on medical wastes handling has to be done.

The recommendation of this study among others are (a) The separation of function of the regulators (Government) and the Operators /medical wastes producers (Hospital, clinics, etc) towards the basic policy of what si called "The Polluter pay the price" means focusing the divisions of responsibility of medical wastes management, for government as controlling body only and operators (Hospitals, clinics, etc) as the responsible parties for any mishandling of medical wastes.

4. It is very important to provides sufficient budget and funds as clearly stated in Law 18/2008 and Law 32/2009 for all Environmental Wastes Management problem in including



- medical wastes among others budget for:
- a. Review, evaluation, and outlining of related medical wastes regulation, policies, etc.
  - b. Training, choacing of Inspectors, controller, to supervise the implementation of medical wastes management properly.
  - c. Recruitment of Professional under coordination of MoE in the field of medical wastes management.
5. Improvement of social awareness and mindset and discipline of the society on the importance of maintaining cleanliness, preserving the environment and especially medical wastes handling of all parties in the society.
  6. Understanding the limitation of government to provides budget and fund for coping the ever increasing problem medical wastes, it is justified to enhance the participation or reliable private investors for handling medical wastes where the producers of medical wastes cooperates with this private institution. The pilot plant in big cities such as Jakarta, Surabaya, and Medan for private sector participation is recommended to commence this activities. The above six points should go simultaneously to have optimum result achieved.
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